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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,262	08/26/2003	Brian Harden	DOC.016DC	2074
30310 7590 09/18/2008 DIGITAL OPTICS CORPORATION C/O LEE & MORSE, P.C. 3141 FAIRVIEW PARK DRIVE, SUITE 500 FALLS CHURCH, VA 22042			EXAMINER VARGOT, MATHEU'D	
			ART UNIT 1791	PAPER NUMBER
			MAIL DATE 09/18/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/647,262

**Applicant(s)**

HARDEN ET AL.

**Examiner**

Mathieu D. Vargot

**Art Unit**

1791

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-30, 38, 41-46, 51-55, 57, 61, 62 and 65-70 is/are pending in the application.
- 4a) Of the above claim(s) 28-30, 38, 46, 51-55 and 57 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-27, 41-45, 61, 62 and 65-70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

1.Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 is indefinite in calling for the removal or addition to the replica "prior to said imprinting"—ie, before the replica is in fact made.

2.The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-17, 19-23, 41, 61 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent Application 175,460 in view of European Patent Application 164,834.

European -460 (see Figs. 1A to 1E) discloses the basic claimed method of making optical elements on a substrate/wafer (16) by making a master (10) containing a plurality of optical elements (12) and simultaneously imprinting a replica of these elements in an imprintable material (22) which is hardened to form the replica and removing the master from the hardened replica, the primary reference essentially lacking the aspect of separating the support substrate as specified in instant claim 15 to form individual optical elements including the hardened replica and support substrate. European -834 discloses making individual optical elements by providing lenses (4) on a substrate (1) and then separating the substrate as set forth in instant claim 15. It would have been obvious to have modified the process of the primary reference as

taught by European -834 in order to form individual optical elements as desired.

Providing the resin on the master in lieu of providing it on the substrate would be an obvious modification to the process of the primary reference dependent on the exact viscosity of the resin and pressing arrangement used. Note that it is well known to provide embossed films by either placing a resin on a substrate and then imprinting or applying it to a stamper first and then simultaneously transferring it to the substrate and imprinting. Adhesion promoters are conventional in the art when ensuring that a film stays on a substrate and such would have been obvious in the process of European -460. While European -460 applies a metal coating, it would have been obvious to have applied an anti-reflective coating dependent on the exact optical nature desired for the optical elements. The limitations of instant claims 20-23 are met in the combination with European -834, which teaches the addition of metallic pads on the opposite side of the optical elements. It is submitted that the substrate and master of European -460 constitute wafers as set forth in instant claims 15 and 41. Claims 61 and 62 are met in the primary reference.

3. Claims 18, 27 and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent Application 175,460 in view of European Patent Application 164,834 and Chou.

European -460 and European -834 are applied for reasons of record as set forth in paragraph 2, supra, the references teaching the basic claimed method lacking essentially the aspects of aligning the master and substrate with fiducial marks and the removal or addition of material in a lithographic manner. Chou teaches these aspects in

the making of an optical (col. 1, line 11) component on a wafer substrate—see column 6, lines 46-60 and column 5, line 42 through column 6, line 12. it would have been obvious to have modified the process of European -460 as taught by Chou to facilitate accurate imprinting (claims 18 and 27) and dependent on the exact nature of the optical elements desired (claims 42-45).

4. Claims 24-26 and 65-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent Application 175,460 in view of European Patent Application 164,834 and Napoli.

European -460 and European -834 are applied for reasons of record as set forth in paragraph 2, *supra*, the references teaching the basic claimed method lacking essentially the aspects of imprinting on both sides of the substrate and creating lithographs on both sides of the substrate. Napoli is applied for reasons of record teaching such processing and such would have been obvious in the method of European -460 dependent on the exact nature of the optical elements desired. Bonding two substrates together as opposed to providing the desired patterning on different sides of a substrate and then splitting the substrate longitudinally as disclosed in Napoli would have been obvious.

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir.

1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 15-27, 41-45, 61, 62 and 65-70 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-29 of U.S. Patent No. 6,610,166. Although the conflicting claims are not identical, they are not patentably distinct from each other because of reasons set forth in paragraph 6 of the action mailed July 13, 2006.

6.Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

In view of the new grounds of rejection, applicant's comments directed to Napoli and the previous rejection are now moot. While it is agreed that Napoli does not teach the separation of the substrate and optical elements thereon, newly applied European - 460 and European -834 do teach this. The double patenting rejection over US Patent 6,610,166 has been reinstated in that the terminal disclaimer has not been officially approved. Upon approval, the double patenting rejection will be withdrawn.

7.Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mathieu D. Vargot whose telephone number is 571 272-1211. The examiner can normally be reached on Mon-Fri from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson, can be reached on 571 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Vargot  
September 15, 2008

/Mathieu D. Vargot/  
Primary Examiner, Art Unit 1791